Differentiated Instruction in the Inclusive Classroom

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What is Differentiated Instruction?

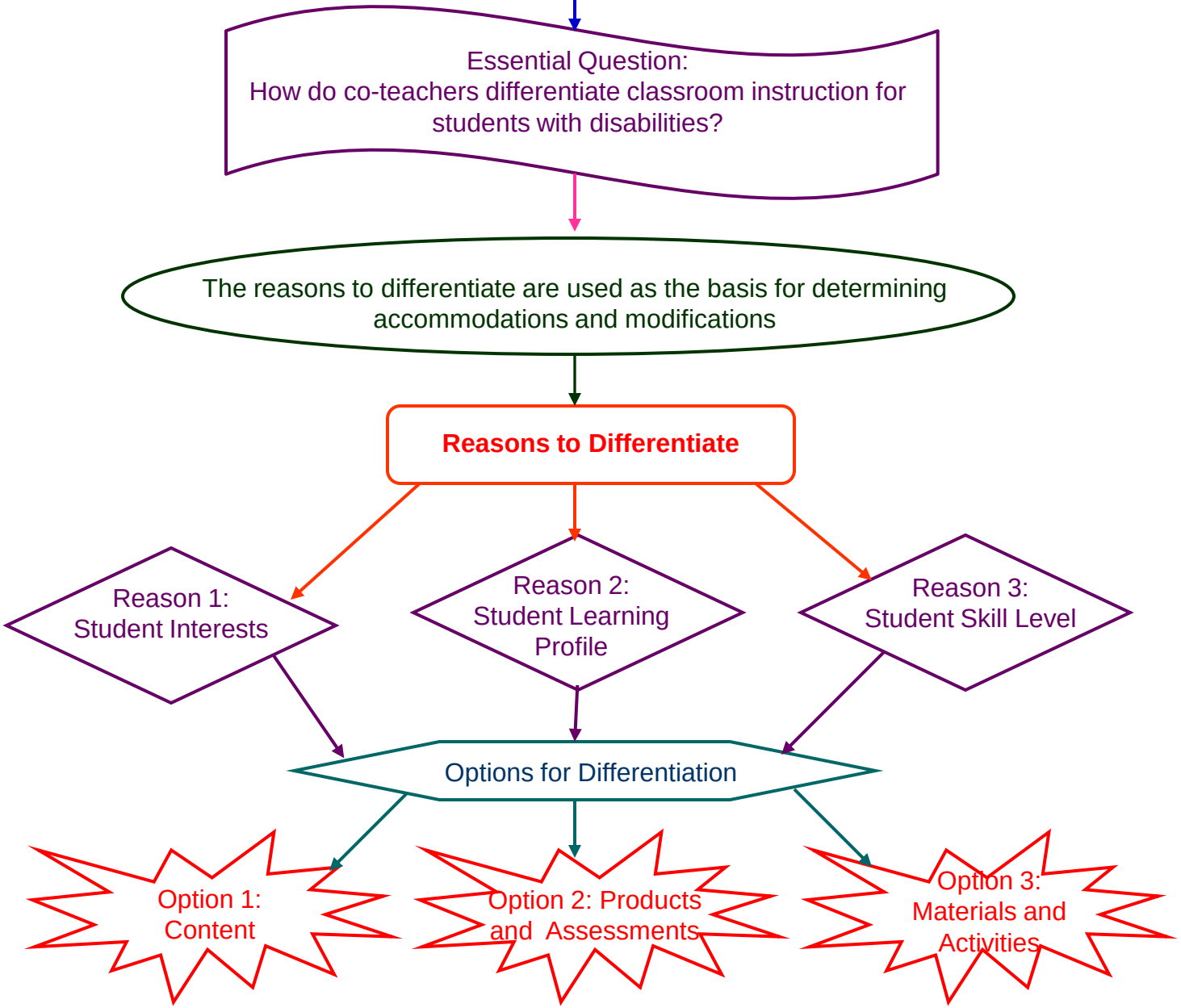
Differentiated instruction is a philosophy of teaching that assumes all students learn in different ways.

Instruction is tailored to meet the unique needs and maximize the strengths of each learner in order to meet rigorous state standards.

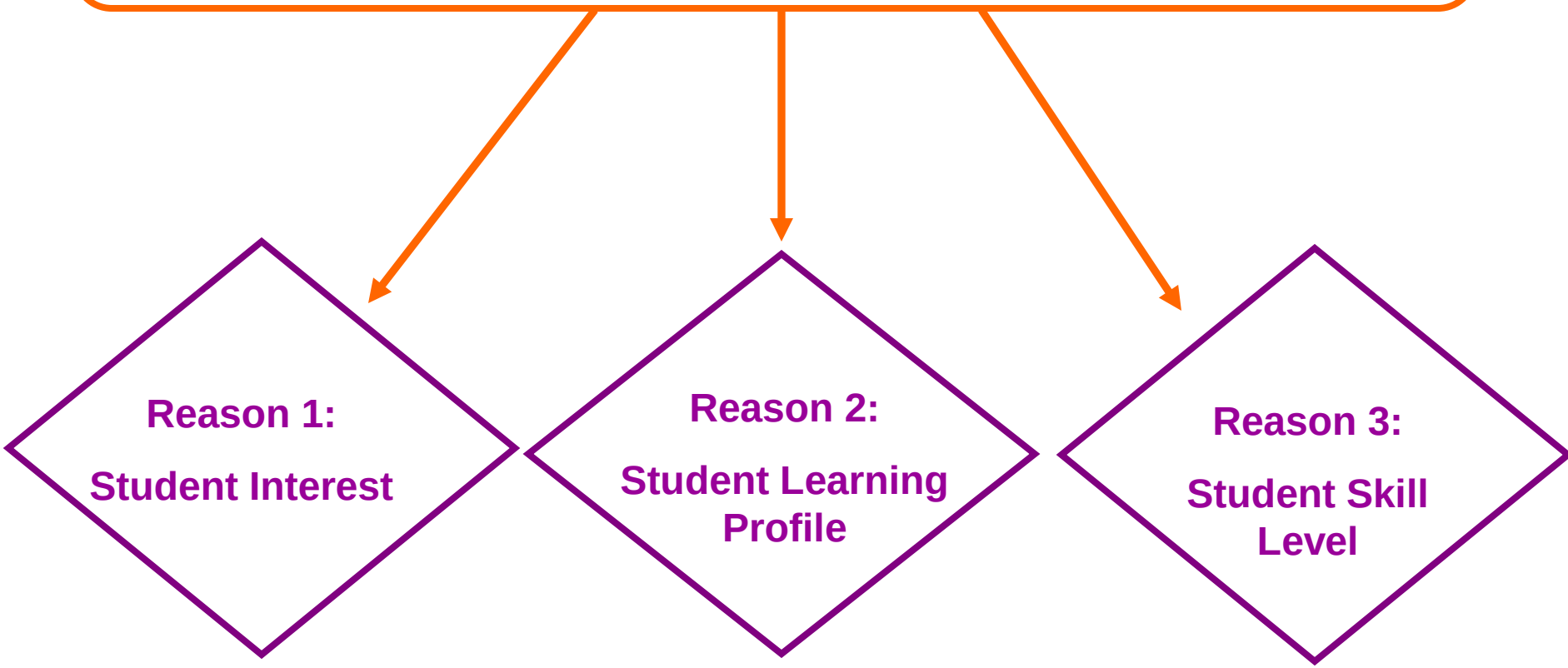
Outcomes for Teachers

- Understandings
  - Differentiation is the key to supporting students with learning differences
  - Co-teaching utilizes differentiation to be effective and efficient
- Essential Question
  - How do teachers differentiate classroom instruction for students with disabilities?
- Knowledge
  - Identify the reasons to differentiate
  - Identify the options for differentiation
- Skills
  - Determine student interests, learning profile, and skill level
  - Identify ways to differentiate content, products, assessments, materials, and activities

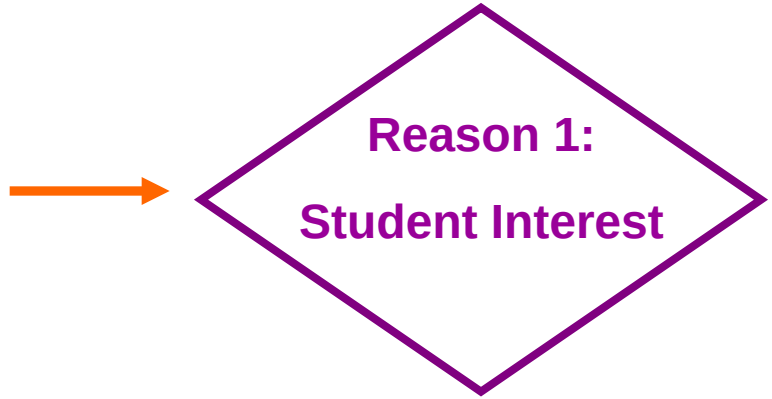
Differentiating Instruction for Students with Disabilities in the General Education Setting



Reasons to Differentiate



Reasons to Differentiate

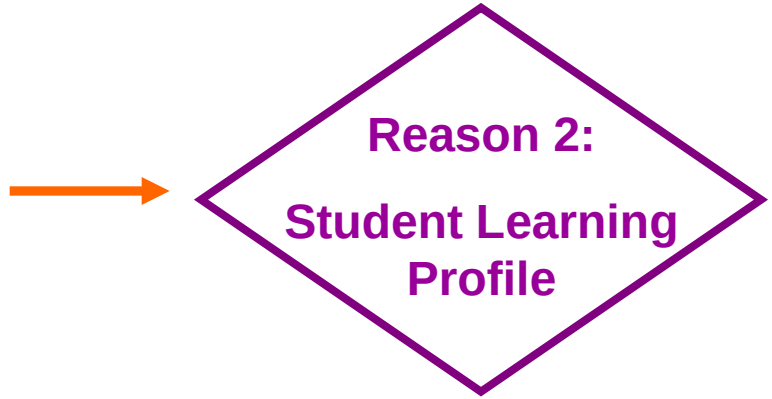


- Students with disabilities have similar interests as other students in the co-taught class and some students with disabilities may have unique or alternative interests

- Using student interests address motivation for learning issues

- Ask students or parents to complete a student interest inventory to gain valuable information for differentiation

Reasons to Differentiate



- Unique for every individual
- Refers to the way students learn
- Includes strength areas that promote learning and weak areas that make learning difficult

Reasons to Differentiate

Reason 2:

Student Learning Profile

Categories of a Learning Profile

- Learning style

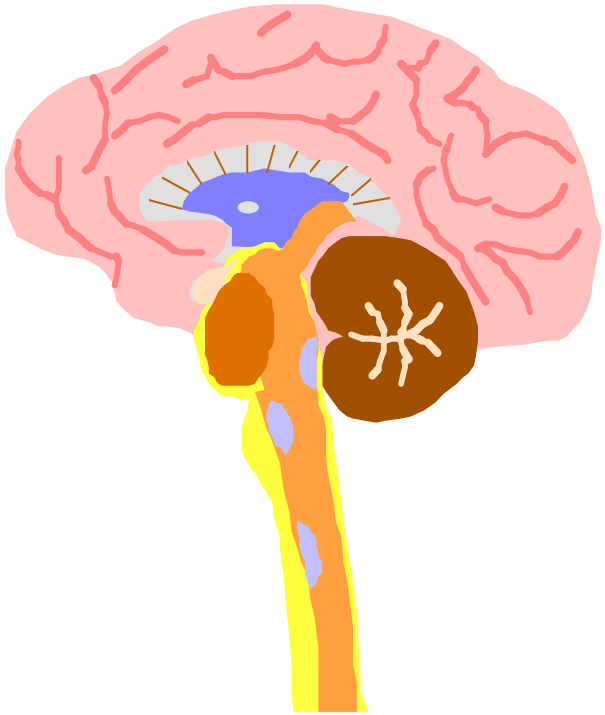
  www.berghuis.co.nz/abiator/lsi/lsiframe.html

- Multiple intelligences

  Multiple Intelligences Inventory

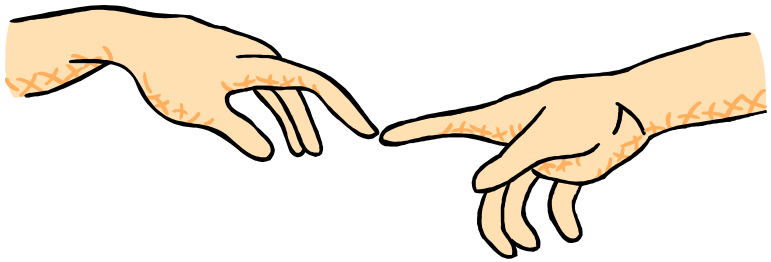
- Culture-influenced characteristics

- Processing Systems



Learning Styles –
Examines how students access, process, and express information

- Visual
- Auditory
- Tactile/Kinesthetic



VISUAL LEARNERS

- Remember 75% of what they read or see
- Enjoy visual projects and presentations
- Remember diagrams, charts, and maps well
- Understand information best when they SEE it

TEACHING STRATEGIES FOR VISUAL LEARNERS

- Provide lots of interesting visual material in a variety of formats
- Make sure visual presentations are well-organized
- Make handouts and all other written work as visually appealing as possible
- Make full use of a variety of technologies: computer, OHP, video camera, live video feeds or close circuit TV, photography, internet, etc.

LEARNING STRATEGIES FOR VISUAL LEARNERS

- Write down things that you want to remember
- Look at the person who is speaking to you; it will help you focus
- When studying, take many notes and write down lots of details
- Use color to highlight main ideas
- Write your own flashcards
- Where possible, use charts, maps, posters, films, video computer software, OHPs both to study from and to present your work

AUDITORY LEARNERS

- MUST HEAR things for them to have best chance of learning
- Only 30% of the general school-age population is *auditory*
- Generally, the *auditory* learner will remember 75% of what they hear in a lecture
- Remember what they hear and say
- Enjoy classroom and small-group discussion
- Can remember oral instructions well

TEACHING STRATEGIES FOR AUDITORY LEARNERS

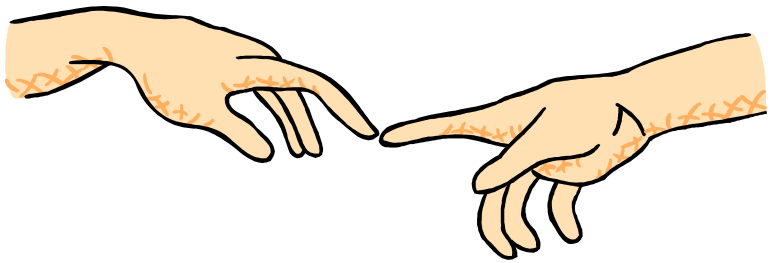
- During lessons, ensure auditory learners are in a position to hear well.
- Re-phrase points, questions. Vary speed, volume, pitch, as appropriate, to help create interesting aural textures.
- Incorporate multimedia applications utilizing sounds, music, or speech (use tape recorders, computer sound cards/recording applications, musical instruments, etc.).

LEARNING STRATEGIES FOR AUDITORY LEARNERS

- Study with a friend so you can talk about the information and HEAR it, too.
- Recite out loud the information you want to remember several times.
- Make your own tapes of important points you want to remember and listen to it repeatedly. This is especially useful for learning material for tests.
- Read out loud when possible. You need to HEAR the words as you read them to understand them well.

TACTILE/KINESTHETIC LEARNERS

- Must DO things for them to have the best chance of learning
- Remembers things they experience the best
- Involves use of the whole body rather than just hands-on



TEACHING STRATEGIES FOR THE TACTILE/KINESTHETIC LEARNER

- Allow students to take breaks during lessons and move around.
- Encourage students to stand or move while reciting information or learning new material.
- Provide lots of tactile-kinesthetic activities in the class.

LEARNING STRATEGIES FOR TACTILE/KINESTHETIC LEARNERS

- To memorize, pace or walk around while reciting to yourself or using flashcards or notes.
- If you need to fidget, try doing so in a way which will not disturb others (try hand/finger exercises or handle a koosh ball).
- While studying, take frequent breaks, but be sure to settle back down to work quickly. A reasonable schedule would be 15-25 minutes of study, 3-5 minutes of break time.

Multiple Intelligences

- Verbal/Linguistic
- Logical/Mathematical
- Visual/Spatial
- Musical/Rhythmic
- Bodily/Kinesthetic
- Interpersonal
- Intrapersonal
- Naturalist

Reasons to Differentiate

Reason 2:

Student Learning Profile

Processing Systems in the Brain

- ❑ Attention
- ❑ Memory
- ❑ Visual-Spatial
- ❑ Sequential
- ❑ Language & Auditory
- ❑ Motor Function
- ❑ Higher-Order Thinking

Reasons to Differentiate

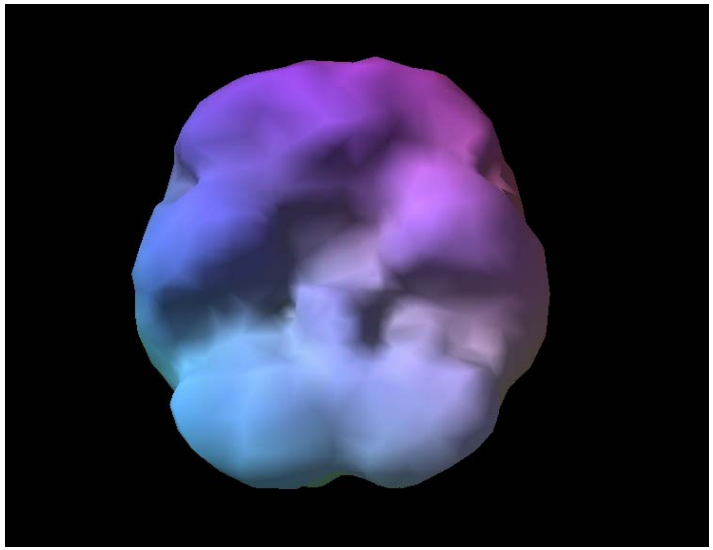
Reason 2:

Student Learning Profile

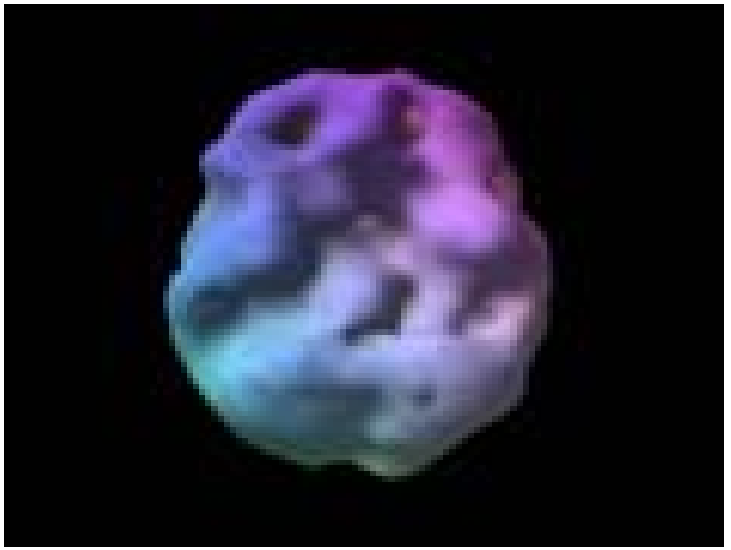
Attention

The only factor becoming scarce in a world of abundance

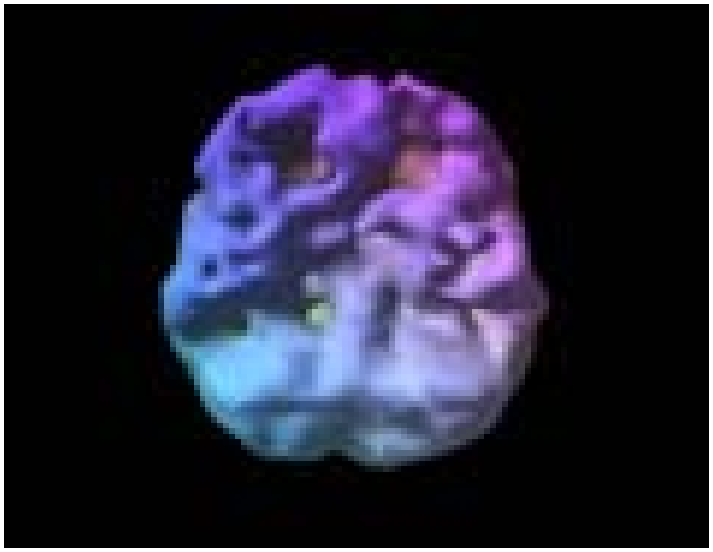
Brain SPECT Studies: www.brainplace.com



Normal Brain



ADHD at Rest



ADHD while Concentrating

ADHD with Adderall

Activity

Think Pair Share

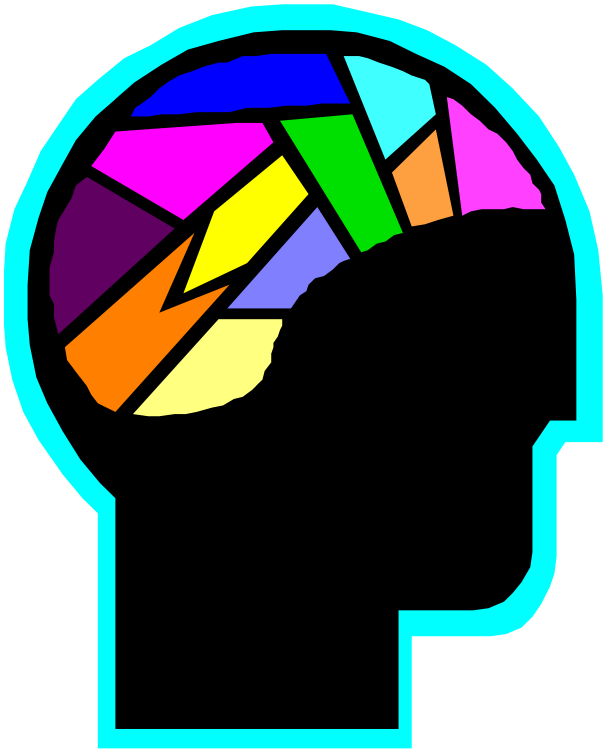
1. What is your reaction to the Brain SPECT Study?
2. What are some of the behaviors you see in your class from students with attention deficits?
3. What are some of the academic issues you see in your classroom with students with attention deficits?

Reasons to Differentiate

Reason 2:

Student Learning Profile

Memory



The advantage of a bad memory

is that one enjoys several times the same good things for the first time. Friedrich Nietzsche ***German philosopher (1844 - 1900)***

Activity: Memory Trivia Game

Test your memory of important facts learned in school about American History:

1. What year was Jamestown founded?
   1607
2. Who was the first vice president of the country?
   John Adams
3. Which state was admitted as the 14th state in 1791, it was the1st addition to the original 13 colonies?
   Vermont
4. Who wrote the Declaration of Independence?
   Thomas Jefferson
5. Which state was the first state to allow women to vote?
   Wyoming

Activity
Think Pair Share

Look at handout five.

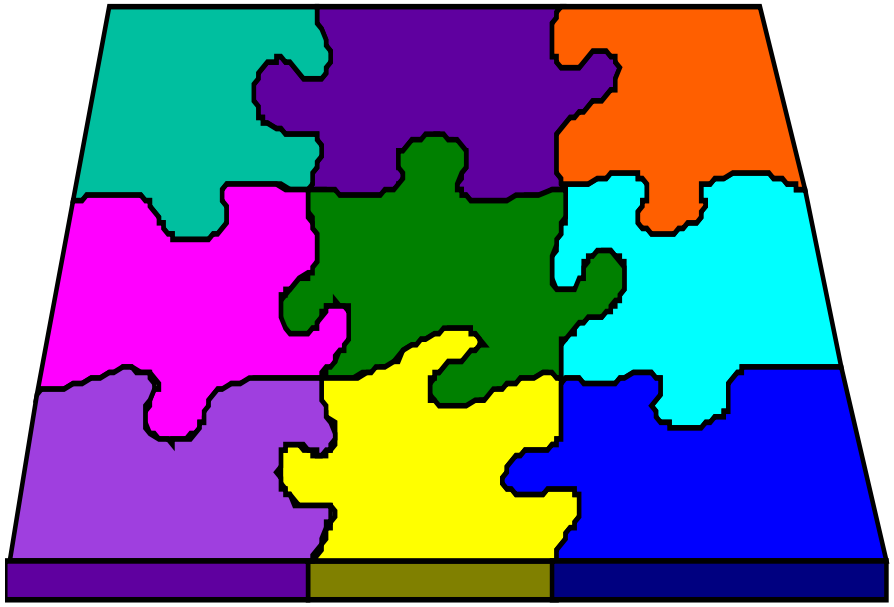
- Identify two behaviors from the second column that you feel would impact learning the most.
- Looking at column one, are the behaviors you identified a short-term memory deficit, and active working memory deficit, or a long long-term memory deficit?
- Looking at column three, what support can you give to students to help them bypass these memory deficits?

Reasons to Differentiate

Reason 2:

Student Learning Profile

Visual-Spatial Processing



Education is the best provision

for the journey to old age. Aristotle

Activity

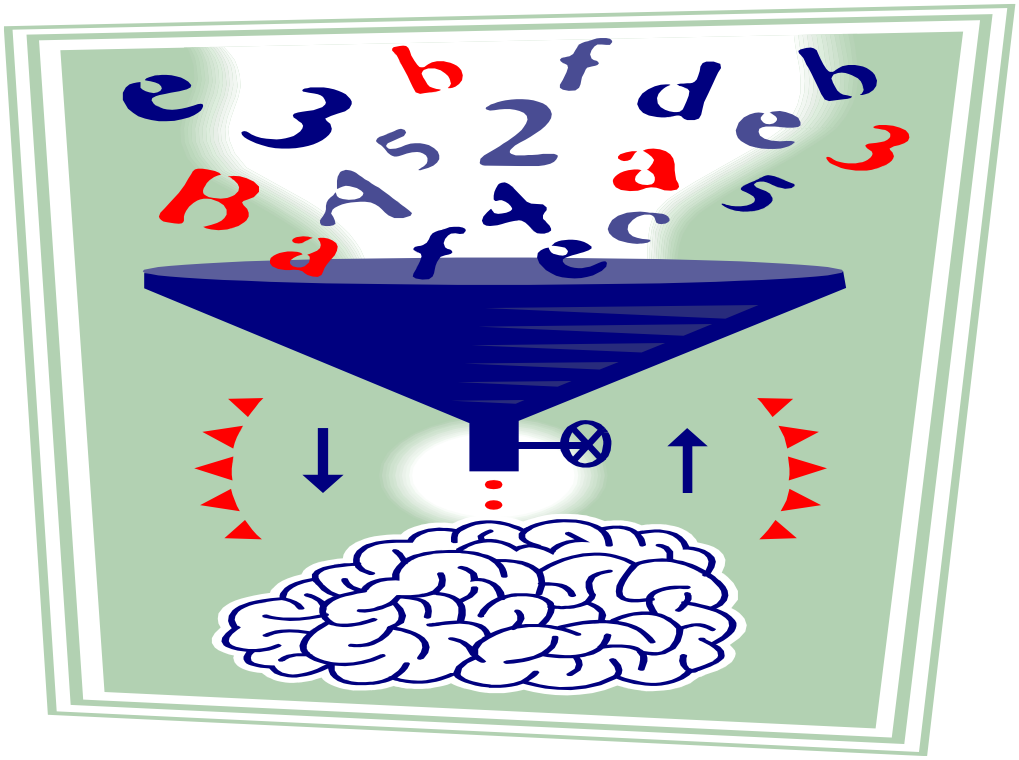
Point North

Reasons to Differentiate

Reason 2:

Student Learning Profile

Sequential Processing



Education is not preparation for life;

education is life itself. John Dewey

Activity: Multi-Step Directions

Follow all four instructions below to solve each of the problem. Write your answer on your paper.

A. Multiply the third number in the first row by the seventh number in the third row.
B. Add this result to the fifth number in the second row.
C. Add to this total, ten times the fourth number in the third row,
D. Subtract the eighth number in the first row from the result.

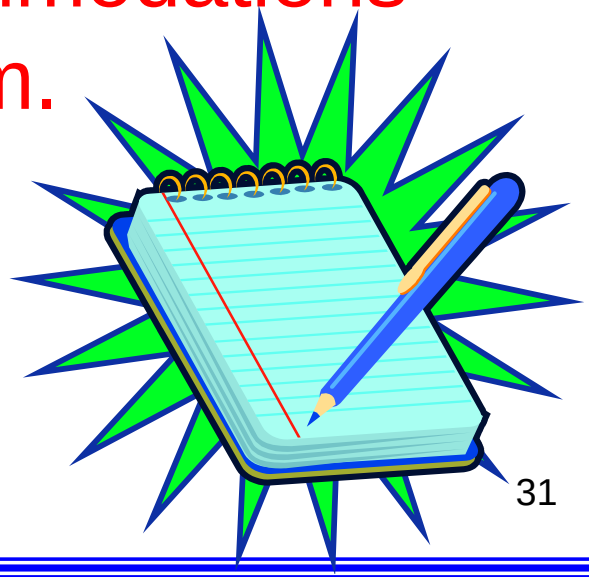
Problem 1:
6 5 8 7 4 5 6 8 4
3 2 1 9 5 6 4 2 1
6 5 1 5 1 3 2 3 5

ANSWER: 63

Activity

Sequential Processing Handout

Look at two of the accommodations listed to assist students with sequential processing deficits. Make a note describing how these accommodations would look in your classroom.

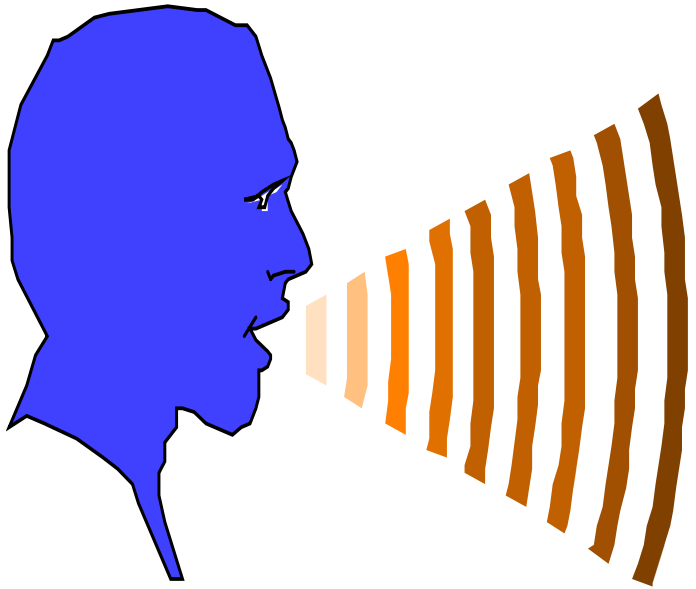


Reasons to Differentiate

Reason 2:

Student Learning Profile

Language and Auditory Processing



In Paris they simply stared when I spoke to them in French;

I never did succeed in making those idiots understand their language.

Mark Twain *(1835 - 1910)*

Activity: Reading for Information

When you see:	Pronounce as:
q	d or t
z	m
p	b
b	p
ys	er
a, as in bat	e, as in pet
e, as in pet	a, as in bat

We pegin our qrib eq a faziliar blace, a poqy like yours enq zine.

Iq conqains a hunqraq qrillion calls qheq work qogaqhys py qasign.

Enq wiqhin each one of qhese zany calls, each one qheq hes QNA,

Qhe QNA coqe is axecqly qhe saze, a zess-broquceq rasuze.

Activity: Reading for Information

We begin our trip at a familiar place, a body like yours and mine.

It contains a hundred trillion cells that work together by design.

And within each one of these many cells, each one that has DNA,

The DNA code is exactly the same, a mass-produced resume.

So the code in each cell is identical, a remarkable but valid claim.

Activity

Language and Auditory Processing Handout

Select three accommodations from the third column and describe how you would use them in a co-taught classroom.

Reasons to Differentiate

Reason 2:

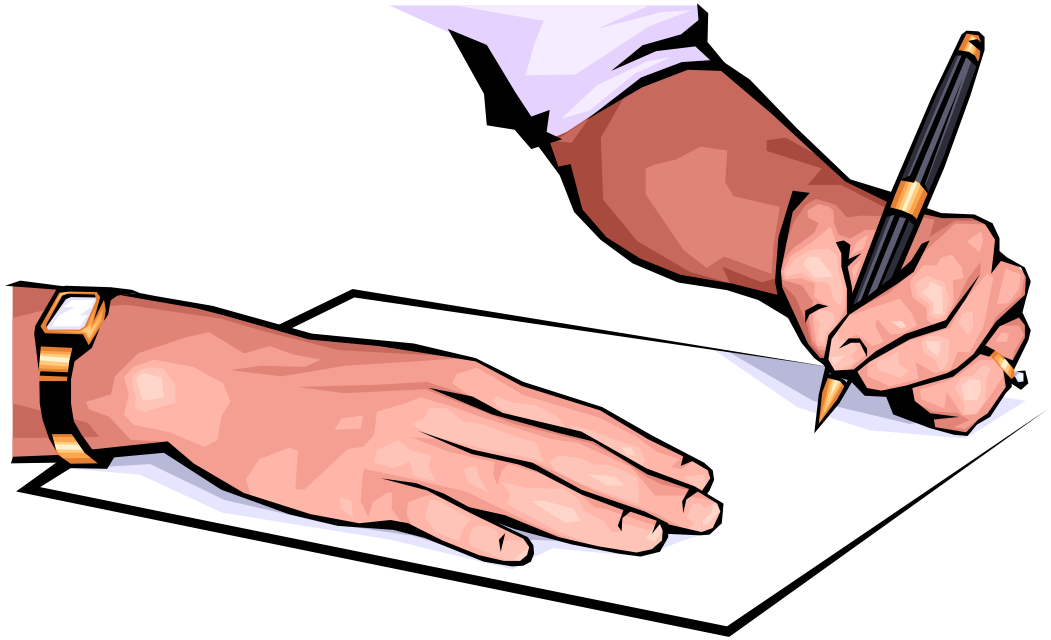
Student Learning Profile

Motor Function

There is no great writing,

only great rewriting. Justice Brandeis

Activity: Dysgraphia



Copy this sentence with your non-dominant hand.

"There is no great writing, only great rewriting."

Handout pg.21

Reasons to Differentiate

Reason 2:

Student Learning Profile

Higher Order Thinking

I have a great belief in the fact that whenever there is chaos,

it creates wonderful thinking. I consider chaos a gift.

Septima Poinsette Clark

Activity

Look at the Higher Order Thinking handout.

- Think of learning activities you did in your class last week.
- How would the indicators in the middle column have affected the learning of students with disabilities?

Reasons to Differentiate

Skill Level (Instructional Level)

- Instructional level is the point at which a student can progress beyond his or her independent level with appropriate support and instruction.
- Instructional level refers to a student's readiness for learning particular content or skills.
- Instructional level is based on assessment.

Reasons to Differentiate

Factors Affecting Skill Level (Instructional Level)

- Lack of prerequisite skills
- Mastery of previous grade-level standards
- Need to practice or more time to learn
- Reading level
- Cognitive ability

Reasons to Differentiate

Important Information Regarding Instructional Level

- Standardized achievement scores
- IEP Information
- CRCT and other statewide testing results
- Informal reading inventories
- Portfolio products
- Informal classroom assessment

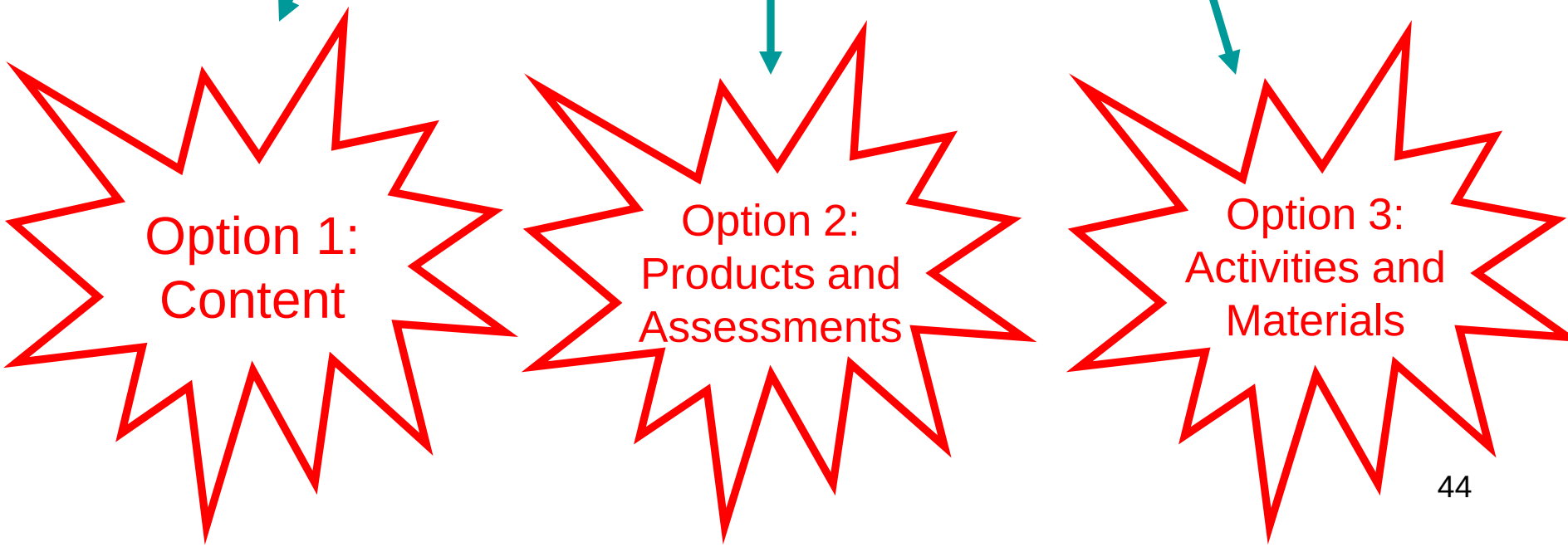
Reasons to Differentiate

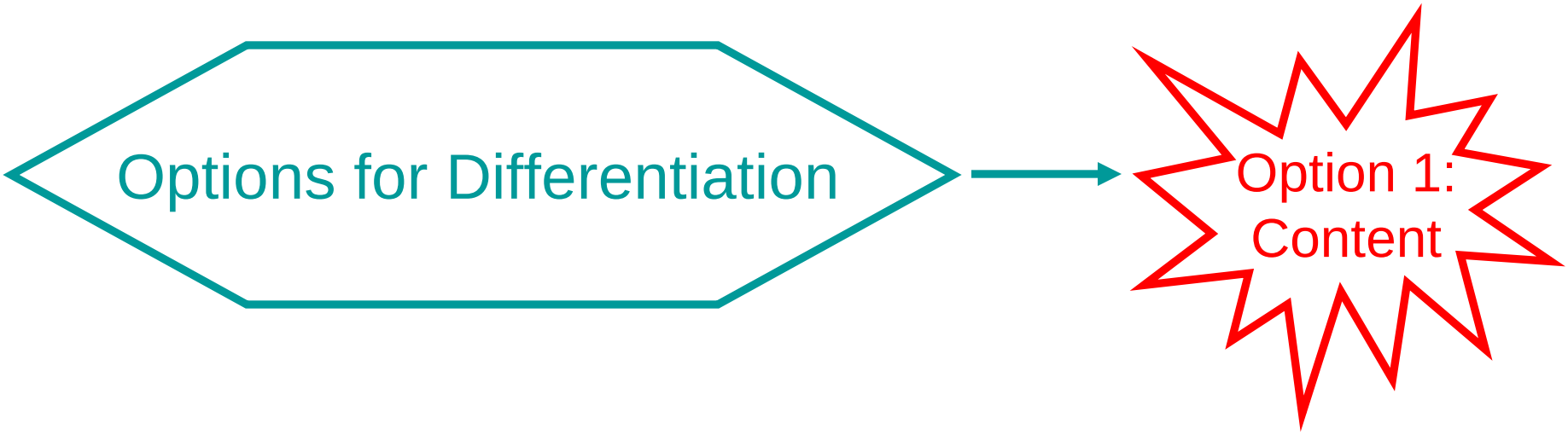
Reason 3:

Student Skill Level

Flexible Groups

Options for Differentiation





Accommodations and Modifications

Options for Differentiation

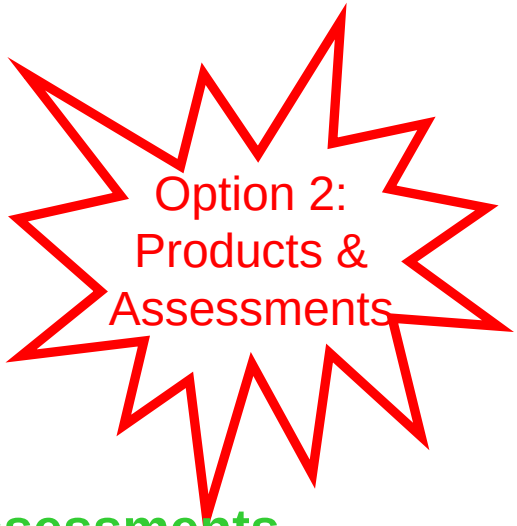
Option 2: Products & Assessments

Requirements for products and tests for units should be developed prior to instruction and reflect a balanced assessment.

- ❑ Authentic assessment
- ❑ Traditional classroom assessment
- ❑ Formal assessment

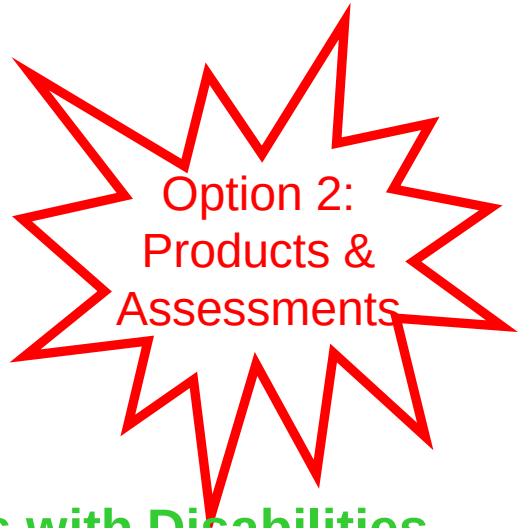
Differentiating Authentic Assessments for Students with Disabilities

- Often in the form of a project/product for a major unit grade based on a rubric
- Consider the following to differentiate:
  - Content (limit the focus)
  - Process (design levels based on Bloom's taxonomy)
  - Product (provide choices for alternative ways to present information)



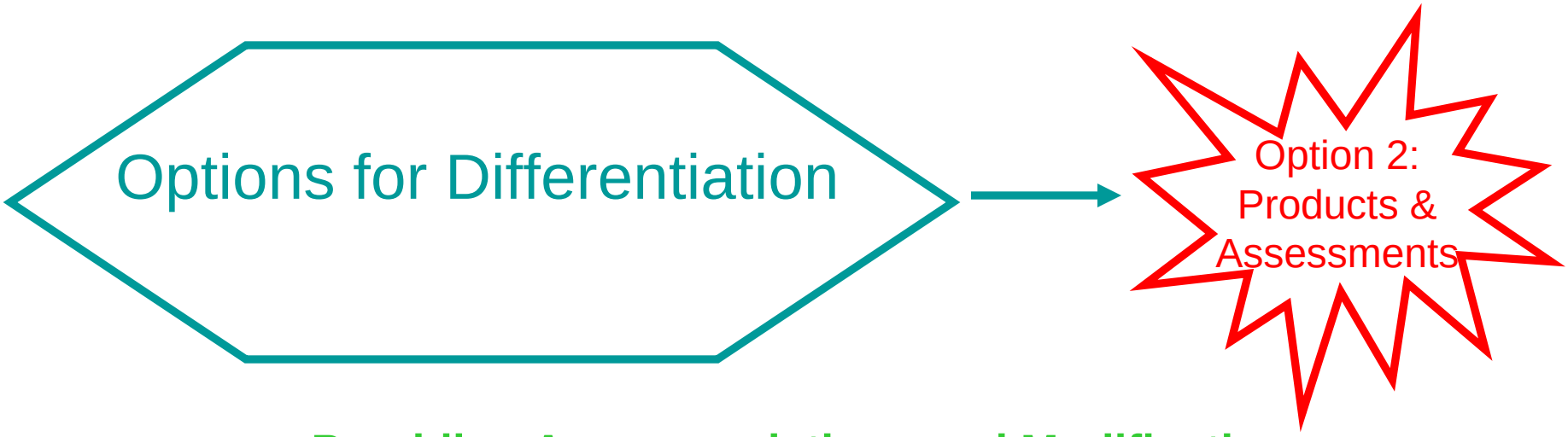
Differentiating Traditional Classroom Assessments for Students with Disabilities

- Base tests and quizzes on identified Understandings, Essential Questions, Knowledge and Skills
- Develop end of unit test, prior to beginning the unit. Give it as a pretest to determine groupings for instruction throughout the unit.
- Follow Universal Design for Tests
- General Ed teacher develops tests/quizzes; Special Ed teacher accommodates or modifies them



Differentiating Tests and Quizzes for Students with Disabilities

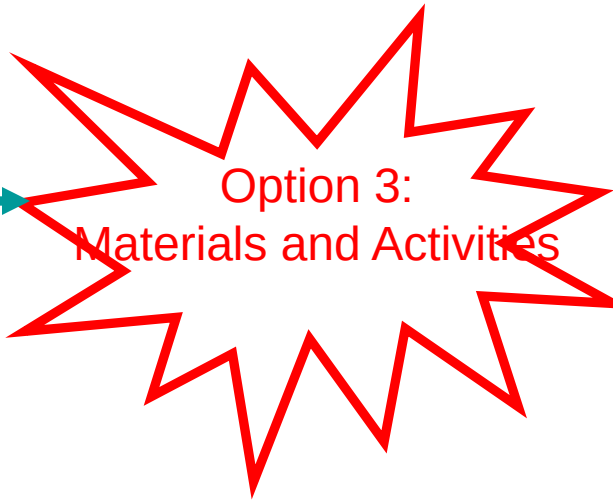
- Determine accommodations and modifications systematically by considering the student's processing systems.
- Examples of differentiating tests and quizzes
  - Attention (small group)
  - Memory (word bank)
  - Visual-Spatial (finish and turn in one page)
  - Sequential (provide formulas)
  - Language (simplify wording on test)
  - High-Order Thinking (highlight type of question)



Providing Accommodations and Modifications for Standardized Testing

- Follow the IEP, must be provide the same testing accommodations and modifications throughout the school year.

- Consult State Department of Education website for accommodations and modifications that change the standardization of the test.



Last, But Not Least, Differentiating Materials,

and Activities

- Remember the discussion and handouts on Learning Processes
- Consider the way activities and materials are being presented. **How can they be adapted to meet the needs of the students with disabilities?**
- Consider what you are asking the student to do. **How can that be adapted to meet the needs of the students with disabilities?**

Explicit Whole Group Instruction

Differentiating Whole-Class Instruction

- Multimodal Presentation
- Interactive Questioning Techniques

Multimodal Presentation

Visual:

- Key words
- Simple Diagrams, Arrows, and Lines
- Photographs and Drawings
- Gestures
- Picturesque Language
- Symbols (e.g. @, &) replace words
- Flow Charts, Tables, and Graphs
- Color Coding, Highlighting, and Underlining
- White Space
- Video

Kinesthetic:

- Use of all 5 senses
- Labs
- Field trips
- Real-life examples
- Hands-on experiences
- Trial and error
- Collections, exhibits, samples
- Examples of finished products
- Examples of completed problems
- Movement

Multimodal Presentation

Auditory:

- Lecture
- Discussion
- Interesting stories and jokes
- Debate
- Voice intonation and volume
- Music

Read/Write

- Handouts
- Notes
- Textbooks
- Readings
- Essays
- Manuals (e.g. Computer. Lab)
- Study guides
- Lists

Interactive Questioning Techniques

- Wait Time
- Numbered Heads Together (Kagan, 1992)
- Think-Pair-Share or Think-Write-Pair-Share (Kagan, 1992)
- Hand Gesture
- Choral Response
- Choral Quick-Write (Kagan, 1992)

Handout

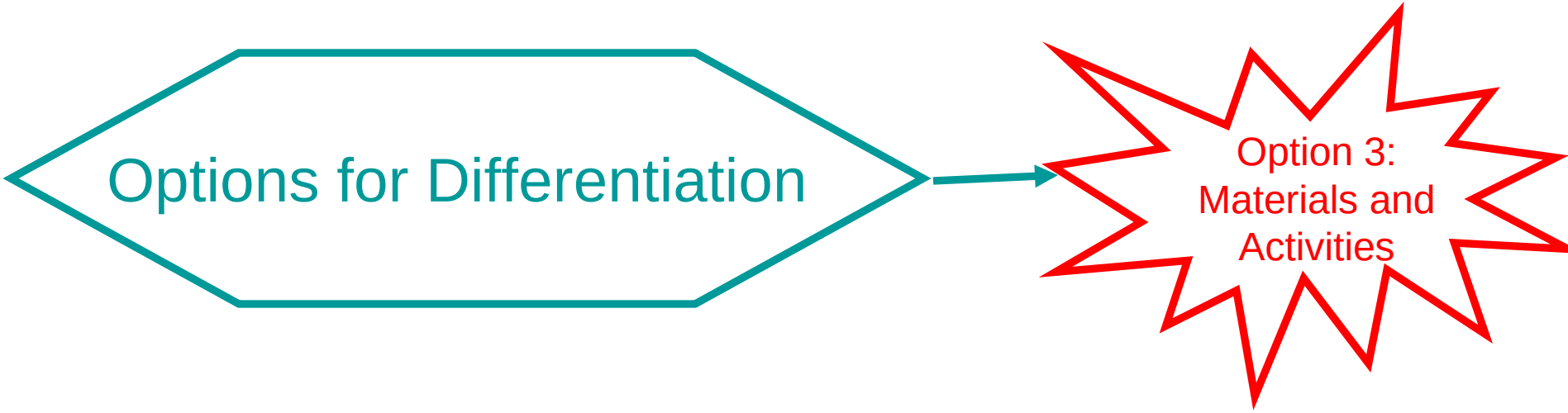
Differentiating Whole-Class Materials

- Same Topic, Varied Materials
- Same Text, Varied Mode of Access
- Cut-Apart (Opitz, 1993)

Jig-Saw Activity

- Divide into 9 groups
- Each group read information on assigned topic
- Report out

Handout



All students **do not** have to meet the Louisiana Content Standards by using the same materials, engaging in the same activities, or even receiving the same instruction.

Tiered Instruction

Tiered instruction is a differentiation strategy in which all students are taught the same essential concept and skill at different levels of complexity in response to diagnosed needs.

Shades of Meaning Activity

Angry- Delighted

Hideous- Gorgeous

Cold- Hot

Honest- Devious

- As a group, think of as many words as possible that go between the two words you find on your table.
- Put each word on a separate post-it note.
- Place words in the order in which they belong.

Using the blank *Step by Step Planning a Tiered Lesson* form in your handout, differentiate the Shades of Meaning Activity.

Identify Focus

Third Grade

Determine meanings of unfamiliar words using a variety of strategies, including:

- knowledge of common antonyms, synonyms, homonyms, and homographs (ELA-1-E1)

Handout

Step by Step Planning

Think About Your Students

- Pre-Assessment
- What type of pre-assessment would be appropriate for examination?

Initial Common Experience

- How would you provide whole group instruction?

Tiered Instruction

- How would you differentiate for groups 1, 2, and 3?

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Resources

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- CRRFTAC
- WRRFTAC

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- Joseph Torgesen
- Carol Ann Tomlinson
- Jay McTighe
- Sharon Walpole
- Michael McKenna
- Debbie Diller

Books:

- Moll, Anne. *Differentiated Instruction Guide for Inclusive Teaching,* 2005, DUDE Publishing: Port Chester, New York
- Tilton, Linda. *The Teacher's Toolbox for Differentiating Instruction*, 2009, Covington Cove Publications: Shorewood, Minnesota